**GENERAL**

Butterfly valves shall be manufactured for a full differential pressure of 350 psig. The valves shall be capable of operating at pressures of 350 psi. Valves shall be Pratt Model HP350 as manufactured by us.

**VALVE BODY**

The body shall be constructed of Ductile Iron ASTM A536 Gr. 65-45-12, with flanged end connections drilled in accordance with ANSI B16.1, Class 250, or mechanical joint ends drilled in accordance with AWWA C111. The body wall thickness shall be in strict accordance with AWWA C504. Table #1, for gray iron 250B valves.

**VALVE DISC**

The disc shall utilize an on-center shaft and symmetrical design, cast from Ductile Iron ASTM A536 Gr. 65-45-12. The disc edge shall be stainless steel type 316. Discs shall be retained by pins that extend through the full diameter of the shaft. The pin material shall be the same as the shaft material. Torque plugs or tangential fasteners shall not be allowed.

**VALVE SHAFTS**

The shaft shall be made of ASTM A-564 Type 630 condition H-1150. The shaft seals shall be “V” type packing. Shaft seals shall be of a design allowing replacement without removing the valve shaft. No O-ring or “U” cup packing shall be allowed. The bearing shall be a stainless steel backed teflon material. Bearing load shall not exceed 1/5 of the compressible strength of the bearing or shaft material.

**VALVE ACTUATORS**

Manual actuators shall be of the traveling nut, self-locking type and shall be designed to hold the valve in any intermediate position between fully open and fully closed without fluttering or creeping. The actuator shall have mechanical stops that will withstand an input torque of 450 lb./ ft. against each stop. Manual actuators shall conform to AWWA Standard C504 and shall be Pratt MDT or an approved equal.